03461500 PIGEON RIVER AT NEWPORT, TN

LOCATION.--Lat 35°57'38", long 83°10'28", Cocke County, Hydrologic Unit 06010106, on left bank 100 ft upstream from bridge on U.S. Highway 25 and 70 at Newport, 0.6 mi downstream from Morell Branch, and at mile 6.8

DRAINAGE AREA.--666 mi^2.

PERIOD OF RECORD.-- September 1900 to September 1929, October 1944 to September 1946, August 1948 to February 1982, October 1996 to current year. Monthly discharge only for some peiods, published in WSP 1306. Published as "near Newport" 1945-46.

REVISED RECORDS.--WSP 1143: Drainage area. WSP 1306: 1901, 1904-10. WSP 1336: 1903, 1917(M), 1919-20(M), 1921, 1924(M), 1927-29(M), 1948-52 (monthly runoff).

GAGE.--Water-stage recorder. Datum of gage is 1,038.76 ft NGVD of 1929. Prior to Oct. 1, 1929, nonrecording gage at present site at datum 2.00 ft higher. May 8, 1945, to July 22, 1946, water-stage recorder at site 4.8 mi downstream at datum 35.85 ft lower. August 13, 1948, to Sept. 30, 1970, at present site at datum 2.00 ft higher.

REMARKS.--Records fair. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data. Considerable regulation by Lakes Junaluska, Logan, and Walters for periods of low flow, combined usable capacity of reservoirs about 12,500 cfs-days. The largest of these, Lake Walters, usable capacity, 10,400 cfs-days was completed in 1929.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of Mar. 7, 1867, and June 17, 1876, reached a stage of 23 ft present datum, under present conditions about 21.1 ft, due to removal of mill dam in 1945, discharge, 48,000 ft^3/s, and flood of August 30, 1940, reached a stage of 19.3 ft present datum, discharge 36,000 ft^3/s, from reports of Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jun 13	0715	*8,280	*8.08	No other peak greater than base discharge.			

Minimum discharge, 205 ft^3/s, Sept. 22.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,510	1,010	1,890	910	839	1,540	2,600	1,650	975	1,060	1,060	1,540
2	2,050	771	2,330	739	814	1,940	3,730	1,350	1,830	1,080	1,040	1,230
3	1,960	1,320	2,400	1,280	906	1,370	3,010	1,460	1,550	1,200	1,160	979
4	1,820	1,330	1,650	1,560	1,190	1,460	2,130	1,260	1,440	1,320	1,190	529
5	1,660	1,670	1,540	2,080	867	948	2,320	1,310	1,350	1,270	1,070	620
6	1,550	655	2,120	1,570	620	1,190	2,280	1,320	1,170	1,540	946	825
7	1,380	979	1,890	1,510	500	1,150	1,980	1,000	1,390	3,030	689	721
8	1,160	1,030	1,480	1,090	722	2,320	1,840	524	1,380	4,010	939	791
9	1,070	1,210	3,270	492	453	2,340	1,250	969	1,920	2,700	986	688
10	1,250	1,380	4,010	813	1,030	2,000	1,300	1,430	1,230	2,150	1,250	757
11	913	923	4,660	809	1,650	1,940	1,780	1,290	1,680	2,440	952	396
12	1,070	1,220	3,590	1,500	1,100	1,870	1,790	893	1,490	1,580	600	502
13	1,450	1,990	2,960	1,370	697	1,390	1,820	755	4,770	1,820	881	968
14	1,030	1,270	2,400	2,830	924	1,730	2,630	1,430	3,030	1,990	567	630
15	1,390	968	1,620	1,890	1,090	1,930	2,670	1,010	2,330	1,450	430	695
16	1,280	1,280	2,060	1,110	1,110	1,670	2,180	1,050	1,690	1,310	718	751
17	1,520	1,280	1,890	1,490	1,400	1,910	1,510	1,200	1,590	1,660	772	691
18	1,450	1,140	1,780	1,550	1,410	1,670	1,640	1,200	1,230	1,470	1,030	401
19	1,190	1,050	1,130	1,880	741	1,260	1,730	1,100	1,250	2,000	1,190	418
20	1,000	783	1,440	1,270	614	671	1,680	2,520	1,730	2,130	1,080	507
21	910	684	1,810	1,520	2,060	1,000	1,950	2,930	1,860	1,720	1,170	407
22	828	1,030	1,740	1,540	2,620	1,500	1,970	2,300	1,280	1,520	802	337
23	582	1,460	2,360	1,190	2,070	1,600	870	1,690	1,290	1,520	864	517
24	269	2,280	2,240	1,330	1,920	2,090	626	1,420	999	1,280	1,050	339
25	435	4,480	1,910	945	2,060	1,960	1,060	972	1,040	1,240	944	268
26	815	3,310	1,540	1,350	1,620	2,080	2,010	1,260	627	1,080	601	265
27	1,220	2,820	1,750	1,210	1,460	1,160	1,820	1,330	802	1,450	747	372
28	1,410	2,190	1,790	1,380	1,930	2,530	1,860	963	1,780	1,240	542	611
29	1,170	2,200	1,420	1,100	---	2,430	1,560	573	1,460	1,270	1,280	624
30	1,380	2,180	1,500	677	---	2,090	1,230	693	1,030	1,030	1,590	552
31	1,120	---	1,440	1,020	---	2,070	---	945	---	755	2,310	---
TOTAL	38,842	45,893	65,610	41,005	34,417	52,809	56,826	39,797	47,193	51,315	30,450	18,931
MEAN	1,253	1,530	2,116	1,323	1,229	1,704	1,894	1,284	1,573	1,655	982	631
MAX	2,510	4,480	4,660	2,830	2,620	2,530	3,730	2,930	4,770	4,010	2,310	1,540
MIN	269	655	1,130	492	453	671	626	524	627	755	430	265
CFSM	1.88	2.30	3.18	1.99	1.85	2.56	2.84	1.93	2.36	2.49	1.47	0.95
IN.	2.17	2.56	3.66	2.29	1.92	2.95	3.17	2.22	2.64	2.87	1.70	1.06

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1901 - 2005, BY WATER YEAR (WY)

MEAN	632	784	1,250	1,578	1,813	2,159	1,804	1,339	1,073	927	777	670
MAX	2,263	2,265	3,271	3,407	4,762	5,136	4,270	3,470	2,436	2,498	2,229	5,032
(WY)	(1965)	(1980)	(1962)	(1974)	(1957)	(1963)	(1903)	(2003)	(1967)	(1916)	(1928)	(2004)
MIN	148	234	391	369	853	907	716	651	457	328	158	145
(WY)	(1979)	(1954)	(1904)	(1981)	(1904)	(1915)	(1967)	(1914)	(1925)	(1925)	(1925)	(1953)

03461500 PIGEON RIVER AT NEWPORT, TN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1901 - 2005	
ANNUAL TOTAL	614,086		523,088			
ANNUAL MEAN	1,678		1,433		1,227	
HIGHEST ANNUAL MEAN					1,761	1909
LOWEST ANNUAL MEAN					644	1914
HIGHEST DAILY MEAN	29,100	Sep 8	4,770	Jun 13	31,000	Apr 2, 1920
LOWEST DAILY MEAN	269	Oct 24	265	Sep 26	48	Sep 21, 1953
ANNUAL SEVEN-DAY MINIMUM	637	Aug 22	358	Sep 21	65	Nov 7, 1980
MAXIMUM PEAK FLOW			8,280	Jun 13	50,000	Feb 28, 1902
MAXIMUM PEAK STAGE			8.08	Jun 13	a23.40	Feb 28, 1902
INSTANTANEOUS LOW FLOW			205	Sep 22	38	Oct 5, 1952
ANNUAL RUNOFF (CFSM)	2.52		2.15		1.84	
ANNUAL RUNOFF (INCHES)	34.30		29.22		25.03	
10 PERCENT EXCEEDS	2,610		2,290		2,400	
50 PERCENT EXCEEDS	1,280		1,320		932	
90 PERCENT EXCEEDS	679		665		330	

a Present datum, under present conditions the stage for this flood would be about 1.9 ft lower, due to removal of dam 1.3 mi downstream in 1945, from reports of Tennessee Valley Authority.